

# WHSC2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14802c

# **Product Information**

WB, E <u>Q9H3P2</u> <u>Q8BG30, NP_005654.3</u> Human Mouse Rabbit Polyclonal Rabbit IgG
5
57277 251-279

## **Additional Information**

Gene ID	7469
Other Names	Negative elongation factor A, NELF-A, Wolf-Hirschhorn syndrome candidate 2 protein, NELFA, WHSC2
Target/Specificity	This WHSC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 251-279 amino acids from the Central region of human WHSC2.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	WHSC2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	NELFA
Synonyms	WHSC2

Function	Essential component of the NELF complex, a complex that negatively regulates the elongation of transcription by RNA polymerase II. The NELF complex, which acts via an association with the DSIF complex and causes transcriptional pausing, is counteracted by the P- TEFb kinase complex.
Cellular Location	Nucleus.
Tissue Location	Ubiquitous. Expressed in heart, brain, placenta, liver, skeletal muscle, kidney and pancreas. Expressed at lower level in adult lung. Expressed in fetal brain, lung, liver and kidney

# Background

This gene is expressed ubiquitously with higher levels in fetal than in adult tissues. It encodes a protein sharing 93% sequence identity with the mouse protein. Wolf-Hirschhorn syndrome (WHS) is a malformation syndrome associated with a hemizygous deletion of the distal short arm of chromosome 4. This gene is mapped to the 165 kb WHS critical region, and may play a role in the phenotype of the WHS or Pitt-Rogers-Danks syndrome. The encoded protein is found to be capable of reacting with HLA-A2-restricted and tumor-specific cytotoxic T lymphocytes, suggesting a target for use in specific immunotherapy for a large number of cancer patients. This protein has also been shown to be a member of the NELF (negative elongation factor) protein complex that participates in the regulation of RNA polymerase II transcription elongation.

## References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Narita, T., et al. Mol. Cell 26(3):349-365(2007) Olsen, J.V., et al. Cell 127(3):635-648(2006) Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006) Ping, Y.H., et al. J. Biol. Chem. 276(16):12951-12958(2001)

### Images



WHSC2 Antibody (Center) (Cat. #AP14802c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the WHSC2 antibody detected the WHSC2 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.